# **CHAPTER 1.0: INTRODUCTION**

### 1.1 STATE MANDATE

This Plan has been prepared in response to the Urban Water Management Planning Act, Water Code Sections 10610 through 10656, which were added by Statute 1983, Chapter 1009, and became effective on January 1, 1984 (Appendix B). The Act was known as Assembly Bill (AB) 797 while pending before the California State Legislature. The Act requires every urban water supplier providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre–feet of water annually, to prepare and adopt an Urban Water Management Plan (UWMP). The act also requires urban water suppliers to update the UWMP in years ending in five and zero using a 25–30 year planning horizon. The Yorba Linda Water District (YLWD), a water purchaser and provider, fits the defined criteria, and has prepared this UWMP addressing all the requirements set forth in the State of California Water Code Section 10610 through 10657. The included UWMP fulfills the December 31, 2005 submittal deadline. Since the initial passage, many amendments have been added to the Act. These changes are intended to encourage increased regional planning and the cooperative management of California's most precious commodity – water. As a result, UWMPs have evolved to become:

- Foundation documents and sources of information for Water Supply Assessments and Written Verification of Water Supply,
- Long range planning documents for water supply,
- Source data for the development of regional water plans,
- Source documents for cities and counties preparing their General Plans, and
- Key components of Integrated Regional Water Management Plans.

The YLWD Board of Directors is dedicated to a water conservation ethic and the efficient use of precious natural resources. Moreover, the Board is dedicated to providing the information and leadership in the Yorba Linda community on water conservation in time of need.

Appropriate water conservation programs require several characteristics in order to be successful. Each program must be diverse and multifaceted so as to reach various target groups and achieve increased levels of water awareness. Collectively, the program elements must complement, reinforce, and build upon one another. Finally, an effective water conservation program aimed at developing a greater level of water awareness requires the coordinated efforts on key tasks by the Department of Water Resources (DWR), Metropolitan

Water District of Southern California (Metropolitan), Municipal Water District of Orange County (MWDOC), Orange County Water District (OCWD), Golden State Water Company (GSWC), and the Yorba Linda Water District (YLWD) along with all of its citizens.

The Yorba Linda Water District is within the service areas of MWDOC and Metropolitan. The YLWD UWMP incorporates, by reference, plans adopted by MWDOC and Metropolitan. Orange County Water District, as a groundwater manager, is not required to complete an UWMP according to the Act.

### **Goals of the Urban Water Management Plan are:**

- To provide regional and local perspective on current and proposed water use efficiency programs.
- To review and evaluate these programs and identify needed improvements.
- To discuss effects of water supply shortages and address short–term and long–term mitigation.
- To serve as an open-ended, dynamic document that can be updated to reflect changes and trends.

## 1.2 REGULATORY CHANGES

The recent introduction of Senate Bill 610: Water Supply Assessments and Senate Bill 221: Written Verifications of Water Supply, places a much greater emphasis on developing an UWMP that will provide the basis for growth by ensuring an adequate water supply for proposed developments. YLWD acknowledges the need to pay close attention to the projected growth and associated demands, as well as the projected availability of the water supply. YLWD has updated the UWMP to reflect the concerns associated with the aforementioned Senate Bills.

### 1.3 ORGANIZATION OF THE PLAN

The chapters of this UWMP correspond to the outline of requirements in the Act, Specifically Article 2, "Contents of the Plan", and Sections 10631, 10632, and 10633. The sequence used to present the information may be different from that shown in the Act in order to present the material in a manner reflecting the unique conditions within the YLWD service area. The UWMP is organized according to the following chapters:

Chapter 1 – Introduction

Chapter 2 – Service Area Profile

Chapter 3 – Water Supply System

Chapter 4 – Past, Current, and Projected Water Demands

Chapter 5 – Water Service Reliability

Chapter 6 – Water Demand Management Measures

Chapter 7 – Water Projects and Programs

Chapter 8 – Water Shortage Contingency Plan

Appendix A – 2005 Urban Water Management Plan Board of Directors Adoption

Appendix B – California Urban Water Management Planning Act

Appendix C – Senate Bill 610

Appendix D – Senate Bill 221

Appendix E – Ordinance No. 91–02

Appendix F – Water Rates and Fees

Appendix G – Population Characteristics

Appendix H – 2005 Water Quality Report

Appendix I – UWMP Project Coordination

Appendix J – Public Hearing Notification

Appendix K – DWR Review Sheets

### 1.4 PLANNING AND COORDINATION

Experienced consultants from Risk Management Professionals prepared this UWMP Update for the Yorba Linda Water District. The Project Team followed the California DWR Guidebook recommended methodology to complete the UWMP and ensured that all tables on the DWR Worksheets were addressed and completed. The Project Team conducted a kick–off meeting to discuss the project timeline, scope, and the implementation of the 2000 UWMP, including the Demand Management Measures (DMM) and Recycled Water Plan. This meeting also served as a mechanism to collect information and verify the accuracy of existing documentation.

As part of the planning and coordination for the UWMP, YLWD coordinated with neighboring cities and water agencies to ensure accurate projections. This coordination is briefly described below:

# City of Yorba Linda, City of Brea, City of Anaheim, City of Placentia, County of Orange, and Golden State Water Company

In accordance with *California Water Code* Section 10621(b), YLWD notified the Cities of Placentia, Brea, Anaheim and Yorba Linda, the County of Orange, and GSWC of the opportunity to submit comments during the UWMP update process. In addition, YLWD provided draft copies of the UWMP to each of the aforementioned cities and agencies.

### **Municipal Water District of Orange County**

MWDOC conducted three countywide coordination workshops and several surveys to facilitate the exchange of planning information with its member agencies. YLWD provided 25-year retail demand projections and a description of any planned development of local supplies. As required by *California Water Code* Section 10631(k), MWDOC provided YLWD information that quantifies water availability to meet their projected demands for the next 25 years, in five-year increments. Based on the projections of retail demand and local supplies completed by YLWD, and the imported supply availability described in Metropolitan's May 2005 Draft Urban Water Management Plan, MWDOC prepared an informational package with data specific to YLWD, that incorporated additional calculations for the required planning efforts. In the informational package, MWDOC quantified the reliability of the wholesale supplies from Metropolitan and the amount expected to be delivered to each agency during normal, single-dry, and multiple-dry years.

### **Orange County Water District**

Information was obtained from OCWD to develop supply projections for the lower Santa Ana River Basin. In addition OCWD provided a detailed description of the basin hydrology and expected yield.

#### **Metropolitan Water District of Southern California**

On behalf of YLWD, MWDOC served as the agency colleting and disseminating information from Metropolitan to agencies within Orange County. Since YLWD purchases Metropolitan water from MWDOC, this coordination was critical to facilitate the development of a reliable UWMP.

### **Public Community Involvement**

The Yorba Linda Water District held a public hearing to solicit comments from the public on their Draft Urban Water Management Plan. The meeting was held to generate interest and encourage the public's participation in the planning process and to actively seek input from the broadest audience possible during the planning process.

Throughout the development of YLWD's UWMP, the Project Team coordinated with representatives from the California Department of Water Resources, Metropolitan, MWDOC, OCWD, GSWC, the Cities of Yorba Linda, Brea, Placentia, and Anaheim, and other relevant agencies to ensure consistency and accuracy of YLWD's UWMP with area, regional, and basin wide plans. The Project Team supplied projections for YLWD's water demand, and incorporated information obtained from the regional coordination into YLWD's UWMP. Table 1.4-1: Coordination with Appropriate Agencies demonstrates these efforts.

Table 1.4-1: Coordination with Appropriate Agencies						
Agency	Participated in UWMP	Commented on the Draft	Attended Public Meetings			
City of Yorba Linda		√				
YLWD	√	√				
Metropolitan						
GSWC						
MWDOC	√					
Risk Management Professionals	V		V			
City of Brea						
City of Anaheim						
City of Placentia						

Table 1.4-1 (Continued): Coordination with Appropriate Agencies						
Agency	Contacted for Assistance	Received Copy of Draft	Sent Notice of Intention to Adopt	Not Involved / No Information		
City of Yorba Linda		V	V			
YLWD	V	V				
Metropolitan			V			
GSWC			V			
MWDOC	V		V			
Risk Management Professionals						
City of Brea			V			
City of Anaheim			V			
City of Placentia			V			

After collecting the information, the Project Team conducted additional research and reviewed the provided documentation, including the following:

- Yorba Linda Water District 2000 Urban Water Management Plan,
- 2005 Domestic Water System Master Plan,
- 2005 Water Quality Report
- Orange County Water Agencies Water Rates, Water System Operations, and Financial Information Survey,
- Municipal Water District of Orange County Draft 2005 UWMP,
- Distribution system and hydrology maps,
- Demographic information, and
- Billing records.

Since water supply infrastructure is a complicated network of interconnected water agencies, extensive coordination with regional and wholesale agencies was necessary to ensure that important information is exchanged and documents are reviewed by all interested parties. The Project Team regularly attended meetings held by MWDOC to properly coordinate the information exchange.

The water service reliability assessment was developed by comparing the projected supply and demand over the next twenty years, in five—year increments. This comparison was completed for normal, single—dry, and multiple—dry water years to plan and prepare for realistic water supply scenarios. In addition, factors resulting in inconsistent supply (i.e., water quality, climate, legal, and environmental) were identified and described. The water service reliability assessment did not identify any gaps between the projected demand and the availability of water to meet that demand. In addition, the Project Team described current or planned water supply projects that will increase YLWD's water supply to meet the growing demands. The description discusses opportunities for projects including any desalination, recycled water, and transfer or exchange opportunities.

The Project Team thoroughly analyzed the Demand Management Measures and discussed the implementation status. For Demand Management Measures that are not implemented or planned for implementation, the Project Team performed a cost–benefit analysis and provided extensive documentation regarding the reasoning behind the non–implementation.

In addition, the water shortage contingency plan addressed the stages of action during a potential water shortage and the associated consumption reduction methods, penalties, and monitoring procedures. The Project Team also addressed supply shortages due to catastrophic incidents (i.e., earthquake, regional power outage, and terrorism) and the steps that will be taken to economically recover from the incident.

Toward the conclusion of the project, drafts of the 2005 UWMP Update Report were developed and a quality control review was conducted by the Project Team before distribution of the final report.